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<110> Istituto di Ricerche di Biologia Molecolare P. Angeletti S.P.A.

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35          40          45
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50          55          60
Leu Ala Gln Ala Ala Leu Pro Ala His Gly Trp Gly Arg Gln Asp Pro
65          70          75          80
Arg His Lys Ser Arg Asn Leu Gly Ile Leu Leu Asp Tyr Pro Leu Gly
85          90          95
Trp Ile Gly Asp Val Thr Thr His Thr Pro Leu Val Gly Pro Leu Val
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Gln Val Ile Tyr Cys Ser Pro Ser Thr Cys Leu His Glu Pro Gly Cys
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 2755 2760 2765
 Arg Ala Trp Arg Lys Lys Ala Arg Ala Val Leu Ala Ser Ala Lys Arg
 2770 2775 2780
 Arg Gly Gly Ala His Ala Lys Leu Ala Arg Phe Leu Leu Trp His Ala
 2785 2790 2795 2800
 Thr Ser Arg Pro Leu Pro Asp Leu Asp Lys Thr Ser Val Ala Arg Tyr
 2805 2810 2815
 Thr Thr Phe Asn Tyr Cys Asp Val Tyr Ser Pro Glu Gly Asp Val Phe
 2820 2825 2830
 Val Thr Pro Gln Arg Arg Leu Gln Lys Phe Leu Val Lys Tyr Leu Ala
 2835 2840 2845
 Val Ile Val Phe Ala Leu Gly Leu Ile Ala Val Gly Leu Ala Ile Ser
 2850 2855 2860

<210> 4

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Partial GBV-B Replicon Sequence

<400> 4

gaccgtagca catggggcgc gccatgattg aacaa

35

<210> 5
<211> 56
<212> DNA
<213> Artificial Sequence

<220>
<223> Partial GBV-B Replicon Sequence

<400> 5
gaccgtagca catgcctggt atttctactc aaacagggcg cgccatgatt gaacaa 56

<210> 6
<211> 74
<212> DNA
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<220>
<223> Partial GBV-B Replicon Sequence

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ccatgattga acaa 74

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<211> 98
<212> DNA
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<220>
<223> Partial GBV-B Replicon Sequence

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gcaagaacaa gcagacgggg cgcgccatga ttgaacaa 98

<210> 8
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Partial GBV-B Replicon Sequence

<400> 8
Met Gly Arg Ala Met Ile Glu Gln
1 5

<210> 9
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Partial GBV-B Replicon Sequence

<400> 9
 Met Pro Val Ile Ser Thr Gln Thr Gly Arg Ala Met Ile Glu Gln
 1 5 10 15

 <210> 10
 <211> 21
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Partial GBV-B Replicon Sequence

 <400> 10
 Met Pro Val Ile Ser Thr Gln Thr Ser Pro Val Pro Ala Pro Gly Arg
 1 5 10 15
 Ala Met Ile Glu Gln
 20

 <210> 11
 <211> 29
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Partial GBV-B Replicon Sequence

 <400> 11
 Met Pro Val Ile Ser Thr Gln Thr Ser Pro Val Pro Ala Pro Arg Thr
 1 5 10 15
 Arg Lys Asn Lys Gln Thr Gly Arg Ala Met Ile Glu Gln
 20 25

 <210> 12
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 <223> Partial HCV Replicon Sequence

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 <222> (29)...(29)
 <223> Xaa = Glu or Gly

 <221> MOD_RES
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 <221> MOD_RES
 <222> (124)...(124)
 <223> Xaa = Asp, Gly, His, or Asn

 <221> MOD_RES
 <222> (136)...(136)

<223> Xaa = Arg or Gly

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<222> (142)...(142)

<223> Xaa = Pro or Ser

<221> MOD_RES

<222> (143)...(143)

<223> Xaa = Pro or Cys

<221> MOD_RES

<222> (146)...(146)

<223> Xaa = Ala, Asp, Ser, or Thr

<221> MOD_RES

<222> (151)...(151)

<223> Xaa = Ser, Ile, or Arg

<221> MOD_RES

<222> (245)...(245)

<223> Xaa = Arg or Gly

<400> 12

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Ala	Lys	Ala	Val	Asp	Phe	Val	Pro	Val	Glu	Ser	Met	Xaa	Thr	Thr	Met
			20					25					30		
Arg	Ser	Pro	Val	Phe	Thr	Asp	Asn	Ser	Ser	Pro	Pro	Ala	Val	Pro	Gln
		35					40					45			
Thr	Phe	Gln	Val	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	Lys	Ser
	50					55					60				
Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	Gly	Tyr	Lys	Val	Leu	Val
65				70						75				80	
Leu	Asn	Pro	Ser	Val	Ala	Ala	Thr	Leu	Gly	Phe	Gly	Ala	Tyr	Met	Ser
			85					90						95	
Lys	Ala	His	Gly	Ile	Asp	Pro	Asn	Ile	Arg	Xaa	Gly	Val	Arg	Thr	Ile
		100					105					110			
Thr	Thr	Gly	Ala	Pro	Leu	Thr	Ser	Met	Leu	Thr	Xaa	Pro	Ser	His	Ile
		115					120					125			
Thr	Ala	Glu	Thr	Ala	Lys	Arg	Xaa	Leu	Ala	Arg	Gly	Ser	Xaa	Xaa	Ser
	130				135						140				
Leu	Xaa	Ser	Ser	Ser	Ala	Xaa	Gln	Leu	Ser	Ala	Pro	Ser	Leu	Lys	Ala
145					150				155					160	
Thr	Cys	Thr	Thr	Arg	His	Asp	Ser	Pro	Asp	Ala	Asp	Leu	Ile	Glu	Ala
			165						170					175	
Asn	Leu	Leu	Trp	Arg	Gln	Glu	Met	Gly	Gly	Asn	Ile	Thr	Arg	Val	Glu
		180					185					190			
Ser	Glu	Asn	Lys	Val	Val	Ile	Leu	Asp	Ser	Phe	Glu	Pro	Leu	Gln	Ala
	195						200					205			
Glu	Glu	Asp	Glu	Arg	Glu	Val	Ser	Val	Pro	Ala	Glu	Ile	Leu	Arg	Arg
	210				215						220				
Ser	Arg	Lys	Phe	Pro	Arg	Ala	Tyr	Ser	Ile	Glu	Pro	Leu	Asp	Leu	Pro
225					230					235				240	
Gln	Ile	Ile	Gln	Xaa	Leu	His	Gly	Leu	Ser	Ala	Phe	Ser	Leu	His	Ser
			245					250						255	

Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala Ser Cys Leu Arg Lys Leu
 260 265 270
 Gly Val Pro Pro Leu Arg Val Trp Arg His Arg Ala Arg Ser Val Arg
 275 280 285
 Ala Arg Leu
 290

<210> 13

<211> 270

<212> PRT

<213> Artificial Sequence

<220>

<223> Partial GBV-B Replicon Sequence

<400> 13

Gly His Val Ile Gly Met Phe Thr Ala Ala Arg Asn Ser Gly Gly Ser
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 Val Ser Gln Ile Arg Val Arg Pro Leu Val Cys Ala Gly Tyr His Pro
 20 25 30
 Gln Tyr Thr Ala His Ala Thr Leu Asp Thr Lys Pro Thr Val Pro Asn
 35 40 45
 Glu Tyr Ser Val Gln Ile Leu Ile Ala Pro Thr Gly Ser Gly Lys Ser
 50 55 60
 Thr Lys Leu Pro Leu Ser Tyr Met Gln Glu Lys Tyr Glu Val Leu Val
 65 70 75 80
 Leu Asn Pro Ser Val Ala Thr Thr Ala Ser Met Pro Lys Tyr Met His
 85 90 95
 Ala Thr Tyr Gly Val Asn Pro Asn Cys Tyr Phe Asn Gly Lys Cys Thr
 100 105 110
 Asn Thr Gly Ala Ser Lys Thr Val Lys Leu Pro Phe Arg Val Asp Gly
 115 120 125
 His Thr Pro Gly Val Arg Met Gln Leu Asn Leu Arg Asp Ala Leu Glu
 130 135 140
 Thr Asn Asp Cys Asn Ser Thr Asn Asn Thr Pro Ser Asp Glu Ala Ala
 145 150 155 160
 Val Ser Ala Leu Val Phe Lys Gln Glu Leu Arg Arg Thr Asn Gln Leu
 165 170 175
 Leu Glu Ala Ile Ser Ala Gly Val Asp Thr Thr Lys Leu Pro Ala Pro
 180 185 190
 Ser Ile Glu Glu Val Val Val Arg Lys Arg Gln Phe Arg Ala Arg Thr
 195 200 205
 Gly Ser Tyr Thr Val Pro Val Glu Asp Leu Pro Ser Ile Ile Ala Gly
 210 215 220
 Val His Gly Ile Glu Ala Phe Ser Val Val Arg Tyr Thr Asn Ala Glu
 225 230 235 240
 Ile Leu Arg Val Ser Gln Ser Leu Thr Asp Met Thr Met Pro Pro Leu
 245 250 255
 Arg Ala Trp Arg Lys Lys Ala Arg Ala Val Leu Ala Ser Ala
 260 265 270

<210> 14

<211> 18

<212> DNA

<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 14
gtaggcggcg ggactcat 18

<210> 15
<211> 19
<212> DNA
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<220>
<223> Oligonucleotide Primer

<400> 15
tcagggccat ccaagtcaa 19

<210> 16
<211> 22
<212> DNA
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<220>
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<400> 16
tcgcgtgatg acaagcgcca ag 22

<210> 17
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide Primer

<400> 17
gatggattgc acgcagggtt 19

<210> 18
<211> 21
<212> DNA
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<220>
<223> Oligonucleotide Primer

<400> 18
cccagtcata gccgaatagc c 21

<210> 19
<211> 19
<212> DNA
<213> Artificial Sequence

<220>

<223> Oligonucleotide Probe

<400> 19

tccggccgct tgggtggag

19